

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
In re Patent Application of NAKATSU et al  
Serial No. 09/373,544  
Filed: August 13, 1999  
Title: SEMICONDUCTOR LIGHT-EMITTING DIODE  
Atty Dkt. 829-522  
C# M#  
Group Art Unit: 2811  
Examiner: Mintel, W.  
Date: November 1, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**RESPONSE/AMENDMENT/LETTER**

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

**Fees are attached as calculated below:**

Total effective claims after amendment 14 minus highest number  
previously paid for 20 (at least 20) = 0 x \$ 18.00 \$ 0.00

Independent claims after amendment 3 minus highest number  
previously paid for 3 (at least 3) = 0 x \$ 84.00 \$ 0.00

If proper multiple dependent claims now added for first time, add \$280.00 (ignore improper) \$ 0.00

Petition is hereby made to extend the current due date so as to cover the filing date of this  
paper and attachment(s) (\$110.00/1 month; \$400.00/2 months; \$920.00/3 months) \$ 0.00

Terminal disclaimer enclosed, add \$ 110.00 \$ 0.00

☐ First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$740.00) \$ 0.00

☐ Please enter the previously unentered, filed

☐ Submission attached

**Subtotal \$ 0.00**

If "small entity," then enter half (1/2) of subtotal and subtract -\$ 0.00

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee (\$180.00) \$ 0.00

Assignment Recording Fee (\$40.00) \$ 0.00

Other: 0.00

**TOTAL FEE ENCLOSED \$ 0.00**

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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NIXON & VANDERHYE P.C.  
By Atty: H. Warren Burnam, Jr., Reg. No. 29,366

Signature: *H. Warren Burnam, Jr.*



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In re Patent Application of

NAKATSU et al

Atty. Ref.: 829-522

Serial No. 09/373,544

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For: SEMICONDUCTOR LIGHT-EMITTING DIODE

\* \* \* \* \*

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**AMENDMENT**

Responsive to the Official Action dated August 1, 2001, please amend the above-identified application as follows:

**IN THE SPECIFICATION**

Please substitute the following paragraphs in the specification for corresponding paragraphs previously presented. A copy of the amended specification paragraphs showing current revisions is attached.

*Please amend the paragraph beginning on Page 6, line 23, to read as follows:*

As described above, the  $\text{Al}_x\text{Ga}_{1-x}\text{As}$  layer suffices as the current diffusion layer of a light-emitting diode, as far as the resistivity is concerned. In order for the  $\text{Al}_x\text{Ga}_{1-x}\text{As}$  current diffusion layer to be transparent with respect to light having a wavelength of 550 to 650 nm, it is required to prescribe an Al mole fraction  $x$  thereof to be 0.65 or more. However, when the Al mole fraction  $x$  becomes high, the  $\text{Al}_x\text{Ga}_{1-x}\text{As}$  layer will exhibit a deliquescence. Thus, in the case where a light-emitting diode having an  $\text{Al}_x\text{Ga}_{1-x}\text{As}$  layer with a high Al mole fraction  $x$  is operated under the conditions of high temperature and high humidity, light intensity is likely to be remarkably decreased.

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